

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* ERIN H. SIBLEY

---

Appeal 2007-1094  
Application 09/844,976<sup>1</sup>  
Technology Center 2600

---

Decided: May 3, 2007

---

*Before:* HOWARD B. BLANKENSHIP, JAY P. LUCAS,  
and SCOTT R. BOALICK, *Administrative Patent Judges.*

BOALICK, *Administrative Patent Judge.*

---

<sup>1</sup> Application filed April 26, 2001. Application 09/844,976 is a continuation-in-part of 09/564,082, filed 5/3/2000, and claims the benefit under 35 U.S.C. § 119(e) of provisional applications 60/249,153, filed 11/16/2000, 60/268,482, filed 02/12/2001, 60/262,811, filed 1/19/2001, 60/271,578, filed 2/22/2001, and 60/272,741, filed 3/1/2001. The real party in interest is The Direct TV Group, Inc. of El Segundo, California.

We note that there appears to be an omission in the Appeal Brief of a prior related appeal and several pending related appeals. See 37 C.F.R. §§ 41.8, 41.37(c)(1)(ii); MPEP 1205.02. Specifically, there was an earlier decided appeal of a related application (Serial No. 09/844,919, Appeal No. 2006-2918) and there are three currently pending appeals of other related applications (Serial Nos. 09/564,082, 09/844,920, and 09/844,932).

## DECISION ON APPEAL

### STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 (2002) from a final rejection of claims 1-12. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Appellant's invention relates to a system and method for distributing electronic content using unused portions of over-the-air broadcast signals.

In the words of the Appellant:

[0008]       The present invention provides a system that combines satellite broadcasting with over-the-air broadcasting to bring service to both fixed and mobile users.

[0009]       In one aspect of the invention, a system for distributing electronic content comprises a satellite and a network operations system that uplinks electronic content to the satellite. An over-the-air broadcast system receives electronic content from the satellite and generates over-the-air electronic content signals during a vertical blanking interval of an analog broadcast signal. A user appliance receives the electronic content for use by the user.

[0010]       In a further aspect of the invention, a method for distributing electronic content comprises the steps of:

          uplinking a plurality of electronic content packages to a satellite;

          receiving the electronic content packages from the satellite;

over-the-air broadcasting the electronic content packages during a vertical blanking interval of an analog broadcast signal; and

receiving the electronic content packages through a user appliance.

(Specification 4, paragraphs 0008 to 0010).

Claim 1 is exemplary:

1. A system of distributing electronic content comprising:

a satellite;

a network operations center uplinking electronic content to said satellite;

a terrestrial over-the-air broadcast center receiving said electronic content from said satellite and generating digital over-the-air electronic content during a vertical blanking interval of an analog broadcast signal; and

a user appliance receiving said electronic content.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Hendricks	6,160,989	Dec. 12, 2000
Kim	6,556,248	Apr. 29, 2003
Owa	6,711,379	Mar. 23, 2004

The Examiner cites the following references in support of the taking of Official Notice:

Kostreski	5,729,549	Mar. 17, 1998
-----------	-----------	---------------

Group I: The Examiner rejected claims 1-7 and 9-12 under 35 U.S.C. § 103(a) for being obvious over Hendricks in view of Kim.

Group II: The Examiner rejected claim 8 under 35 U.S.C. § 103(a) for being obvious over Hendricks in view of Kim and further in view of Owa.

Appellant contends that the claimed subject matter is not rendered obvious by Hendricks in combination with Kim or by Hendricks in combination with Kim and Owa, for reasons to be discussed more fully below. The Examiner contends that each of the claims is properly rejected.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2004).<sup>2</sup>

We affirm the rejections.

---

<sup>2</sup> Except as will be noted in this opinion, Appellant has not presented any substantive arguments directed separately to the patentability of the dependent claims or related claims in each group. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *See In re Young*, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii).

## ISSUE

The issue is whether Appellant has shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 103(a) (2004). The issue turns on whether there is a legally sufficient justification for combining the disclosures of Hendricks and Kim. Appellant asserts that the "Examiner is forming a hindsight reconstruction of the present invention using the teachings of the prior art " and that "no support, motivation, or incentive is provided by the two cited references for the combination proposed by the Examiner." (Br. 5-6). The Examiner asserts the contrary.

## FINDINGS OF FACT

Appellant describes a system 10 that distributes electronic content to users 18 in which a network operations center 12 uplinks electronic content to a satellite 14 and an over-the-air broadcast center 16 receives electronic content from the satellite. (Specification 7, paragraphs 0030-0032; Fig. 1). The over-the-air broadcast center 16 is coupled to a wireless transmitter 60, which "may comprise a cell tower such as that used in cellular phones, a TV tower that broadcasts digital signals or a stratospheric platform positioned above a predetermined metropolitan area for broadcasting over-the-air signals." (Specification 7, paragraphs 0032-0033; Fig. 1). According to the Specification, "digital over-the-air content may be incorporated into unused portions of an analog television broadcast, i.e., the vertical blanking interval." (Specification 7, paragraph 0033).

Hendricks describes a network controller that manages a television program delivery network from a cable headend. (Col. 1, ll. 34-36; Fig. 1).

A program delivery system 200 includes an operations center 202 where program packaging and control information are created and assembled in the form of digital data. (Col. 7, ll. 12-17; Fig. 1). The digital data is mapped into digital signals for satellite transmission to the cable headend 208. (Col. 7, ll. 18-21). These signals are received by the cable headend 208 and may be decoded, demultiplexed, managed by a local central distribution and switching mechanism, combined and then transmitted to the set top terminal 220 located in each subscriber's home over a cable system 210. (Col. 7, ll. 24-29).

Hendricks teaches that "[a]lthough concatenated cable systems 210 are the most prevalent transmission media to the home, telephone lines, cellular networks, fiberoptics, Personal Communication Networks and similar technology for transmitting to the home can be used interchangeably with this program delivery system 200." (Col. 7, ll. 29-34).

Hendricks also discloses that analog signals may be transmitted over the communications media 216 linking the cable headend 208 and the subscriber's home. (Col. 10, ll. 20-25; Fig. 3).

Kim describes an image signal processor, specifically a hyper text markup language (HTML) data transmitting/receiving apparatus that selectively inserts an NTSC broadcasting signal and an HTML signal into a VHF or UHF broadcast channel. (Col. 1, ll. 9-13; Figs. 1, 3). In one embodiment, an HTML data signal may be transmitted by being loaded in the Vertical Blanking Interval (VBI) of a TV broadcast signal. (Col. 5, ll. 28-31). In a section entitled "Description of the Conventional Art," Kim also describes prior art systems that insert and transmit information in the

VBI of a TV broadcast signal together with the TV program so that the user can receive various information. (Col. 1, ll. 25-40).

Owa describes a digital broadcasting system for broadcasting multimedia data to a terminal device in a mobile station. (Col. 1, ll. 6-9; Fig. 1).

A reference cited in an IDS dated January 30, 2006 submitted by Appellant states that "stratospheric telecommunications networks us[e] high-altitude planes or balloons to serve as sort of tall antennas or very low satellites, depending on the perspective." (Robert Glenn et al., *Wireless Information Technology for the 21<sup>st</sup> Century* 17 (Info. Tech. Lab., Nat'l Inst. of Standards & Tech., Draft Wireless White Paper, Feb. 17, 1999)).

#### PRINCIPLES OF LAW

"In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

On appeal, Appellant bears the burden of showing that the Examiner has not established a legally sufficient basis for the rejection of the claims.

Appellant may sustain its burden by showing that where the Examiner relies on a combination of disclosures, the Examiner failed to provide sufficient evidence to show that one having ordinary skill in the art would have done what Appellant did. *United States v. Adams*, 383 U.S. 39 (1966); *In re Kahn*, 441 F.3d 977, 987-988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006); *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick, Co.*, 464 F.3d 1356, 1360-1361, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006).

The mere fact that all the claimed elements or steps appear in the prior art is not *per se* sufficient to establish that it would have been obvious to combine those elements. *United States v. Adams, supra; Smith Industries Medical systems, Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1420 (Fed. Cir. 1999).

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). If that burden is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

In sustaining a multiple reference rejection under 35 U.S.C. § 103(a), the Board may rely on one reference alone without designating it as a new ground of rejection. *In re Bush*, 296 F.2d 491, 496, 131 USPQ 263, 266-67 (CCPA 1961); *In re Boyer*, 363 F.2d 455, 458 n.2, 150 USPQ 441, 444 n.2 (CCPA 1966).

Our reviewing court states in *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) that "claims must be interpreted as broadly as their terms reasonably allow." Our reviewing court further states that "the words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312, 75 USPQ2d 1321,



1326 (Fed. Cir. 2005) (en banc) (internal citations omitted). The "ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313, 75 USPQ2d at 1326.

### ANALYSIS

Appellant contends that Examiner erred in rejecting claims 1-12 under 35 U.S.C. 103(a). Reviewing the findings of facts cited above, we do not agree. In particular, we find that the Examiner made a prima facie showing of obviousness with respect to claims 1-12 and Appellant failed to meet the burden of overcoming that prima facie showing.

We find that a skilled artisan would have used the VBI broadcast signal teachings of Kim to aid in increasing the efficiency of the program delivery system of Hendricks.

Regarding claim 1, we note that the plain language of claim 1 does not require the "electronic content" received by the terrestrial over-the-air broadcast center and also received by the user appliance to be the same as the "digital over-the-air electronic content" generated during a vertical blanking interval of an analog broadcast signal by the terrestrial over-the-air broadcast center. Claim 1 does not link or otherwise show a relationship between the "electronic content" limitation and the "digital over-the-air electronic content" limitation. Neither does the plain language of claim 1 require the "electronic content" received by the user appliance to be received from the terrestrial over-the-air broadcast center. Further, Appellant has

provided no special definition of "digital over-the-air electronic content" in the Specification.

Thus, under a reasonable interpretation of claim 1 the cable headend of Hendricks may receive certain electronic content from the satellite and separately generate different digital over-the-air electronic content to be transmitted to the user during the vertical blanking interval of an analog broadcast signal using the VBI teachings of Kim. As claimed, the subject matter of claim 1 reads on Hendricks in view of Kim.

Even if the "electronic content" received by the terrestrial over-the-air broadcast center and also received by the user appliance is the same as the "digital over-the-air electronic content" generated during a vertical blanking interval of an analog broadcast signal by the terrestrial over-the-air broadcast center, claim 1 still reads on Hendricks in view of Kim. Our findings above indicate that Hendricks receives signals from a satellite, and the same signals are manipulated and transmitted to the set top terminal of the subscriber over various possible transmissions systems. Hendricks teaches that an analog signal could be used to transmit signals to the subscriber, and the VBI teachings of Kim would improve the efficiency of that transmission.

Regarding claim 2, the plain language of the claim merely requires the "over-the-air broadcast center" to be "coupled to" a "stratospheric platform." We decline Appellant's invitation to import limitations from the Specification into the claim. As our findings above indicate, Hendricks teaches a cable headend coupled to a satellite. Also, the term "stratospheric platform" is broad enough that a skilled artisan would recognize that a satellite could be a stratospheric platform.

Regarding claim 3, Appellant admits that Hendricks teaches a cellular network, but nevertheless argues that there is no teaching or suggestion of a cell tower. (Reply Br. 3). Appellant does not respond to the Examiner's argument that a cell tower is inherent in a cellular network. We agree with the Examiner that a cell tower is inherent in a cellular network.

With respect to claim 4, Appellant argues that a TV broadcast tower is not shown in Hendricks (Br. 6). The Examiner took Official Notice that TV broadcast towers are well known as a transmission scheme, as evidenced by Kostreski. (Answer 4-5). We agree with the Examiner.

Claims 5 and 6 were not argued separately, and stand or fall together with claim 1.

Regarding claim 7, Appellant argues that a fixed user appliance is not taught or suggested by Hendricks. (Br. 7). The Examiner replies that the set top terminals of Hendricks are fixed. (Reply Br. 5). We agree with the Examiner.

With respect to claim 8, we find that a skilled artisan would have used the mobile device teachings of Owa to make the system as taught by Hendricks in view of Kim more convenient to the user by enabling the user to roam freely with the mobile terminal.

Claims 9-12 were argued on the same grounds as claims 1-4, and we affirm the rejection of claims 9-12 for the same reasons as discussed above with respect to claims 1-4.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner did not err in rejecting claims 1-12. The rejection of those claims is affirmed.

DECISION

The rejection of claims 1-12 is Affirmed.

AFFIRMED

KIS

HUGHES ELECTRONICS CORP.  
CORPORATE PATENTS & LICENSING  
BLDG. R11, MAIL STATION A109  
P. O. BOX 956  
EL SEGUNDO, CA 90245-0956